UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,339	08/15/2005	Michinari Miyagawa	KITO5.001APC	9314

20995 7590 11/19/2007

KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER	
NGUYEN, KHANH TUAN	

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
11/19/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No.	Applicant(s)	
	10/519,339	MIYAGAWA ET AL.	
	Examiner	Art Unit	
	Khanh T. Nguyen	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Final Rejection

Response to Amendment

1. The amendment filed on 09/10/2007 is entered and acknowledged by the Examiner. Claims 1-8 are currently pending with in the instant application. Claims 9-23 have been canceled.

Response to Arguments

2. Applicant's arguments, see pages 4-6, filed on 09/10/2007, with respect to the rejection(s) of claims 1-6 under 102(b)/103(a) over Kanno et al. and claims 7-8 under 103(a) over Kanno et al. in view of Takeru et al. have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Knobel, Nakazawa et al., and Miyamoto.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 12/22/2004 and 12/07/2006 has been regarded by Examiner and made of record in the application file.

Drawings

5. The drawing(s) submitted on 12/22/2004 has been regarded by Examiner and made of record in the application file.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Knobel et al. (U.S Pat. 5,110,669 hereinafter, "Knobel").

Knobel teaches (please see Fig. 1) a bi-layer conductive polymer laminate film 10 wherein a conductive layer 15 and static dissipative layer 14 (substrate layer) comprising of polymer (i.e. resin) and conductive agent such as carbon fibers and metal

salt (Col. 3, lines 58-66 and Col. 4, lines 47-54). Knobel further teaches the conductive layer having a resistivity of less than about 10^2 ohm-cm (Col. 3, lines 54-57). Knobel disclosure of a conductive layer 15 is considered to read on the instant claimed limitation of a low-resistance layer with a volume resistance of 0.1 to 1.0 ohm-cm in a thickness direction as at least one of its outermost layer.

The reference specifically or inherently meets each of the claimed limitations. The reference is anticipatory.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazawa et al. (U.S Pat. 6,671,165 hereinafter, "Nakazawa") in view of Miyamoto (Machine English Translated JP Pub. 2000-012388).

With respect to instant claims 1-5 and 7-8, Nakazawa generally discloses (please refer to figure 2) a conventional electric double layer capacitor comprising of a pair of polarized electrodes 12 separated by a separator 11. The polarized electrodes 12 are composed of powder active carbon or active carbon fiber and phenol resin. Nakazawa further discloses the said polarized electrodes 12 (conductive inner-layers) are directly

laminated with the collector layers 14. The collective layers 14 are arranged on the outer surfaces of said polarized electrodes 12 (Col. 1, lines 25-40). Nakazawa disclosure of an active carbon fiber is considered to have a diameter and length within the claimed range because such as carbon fiber is known in the art.

Nakazawa does not explicitly disclose the collective layers 14 (outermost layer) comprising of resin and a conductive agent.

In the same field of endeavor, Miyamoto teaches (please refer to figures 1-3) an electric double layer capacitor comprising of a pair of polarized electrodes 1 separated by separator 2. The said polarized electrode layers 1 are directly laminated with an outer conductive film 6 (i.e. collector). The conductive resin film 6 is composed of resin and conductive agent such as carbon black fiber. The said conductive resin film 6 (i.e. collector) have a low volume-resistivity of 1 or less ohm-cm [0006]. Miyamoto also teaches the low volume-resistivity film having a thickness of 20 micrometers or less [0003].

Nakazawa and Miyamoto references are combined because both references teach analogous art of an electric double layer capacitor having an inner polarized electrode directly laminated with a current collector layer. Therefore, it would have been obvious to one of ordinary skill in the art to at the time of the invention to arrived at the claimed laminated conductive resin film by modifying the collector layer 14 of Nakazawa to incorporate resin and carbon fiber having a low-resistivity as suggested by Miyamoto, such as a laminated conductive resin film containing resin and carbonaceous material

used as collector and capacitor is expressly suggested and therefore is an obvious formulation.

Regarding claim 6, Nakazawa teaches a process for forming a conductive resin film by coating (applying) a conductive resin solution containing conductive material onto a flat surface of a support such as copper foil (Col. 2, lines 58-61), the coating is dried to form a collector layer (Col. 2, lines 62-63), the collector layer is contacted with a polarized electrode layer (i.e. conductive substrate layer) which comprising of resin and a conductive agent forming a lamination (Col. 2, lines 64-64).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KTN
11/08/2007

Mark Kopec
Primary Examiner